TULLICH_1

Location: OTWAY BASIN
Latitude: -37.5224606 S
Longitude: 141.1501313 E

Total Depth Drilled (KB) = 1634 m
KB Elevation = 82.9 m amsl
Seismic line reference: OBR88a-10A SP265

Completed by Planet Exploration 1964
Status = P&A

Lithostratigraphy by C. Lavin 1996
Lithological interpretation WCR
Palynology by Dettmann 1969, Morgan 1989
Produced by the Basin Studies Group 26-Oct-2001

State Government Victoria AUSTRALIA — Department of Primary Industries

Lithological legend

Carbonate Lithotypes
- Limestone
- Limestone, sandy
- Limestone, dolomitic
- Dolomite
- Dolomite, calcareous
- Marl

Siliciclastic Lithotypes
- Conglomerate
- Sandstone, pebbly
- Sandstone
- Sandstone, calcareous
- Sandstone, argillaceous
- Sandstone, glauconitic
- "Greensand"
- I'bedded sandstone & mudstone
- Siltstone
- Mudstone (shale)
- Mudstone, calcareous
- Claystone
- Coal

Others
- Extrusive rocks
- Mafic sills
- Plutonic rocks
- Metamorphic rocks

N.B. Not all lithological patterns in the legend have been used in this wellsheet.

Accessory minerals legend

C - carbonaceous debris
P - pyrite
G - glauconite
M - mica
Arrowheads indicate SWC range & abundance
Patterns indicate cuttings/core range & abundance

trace · minor · common · abundant

Pristane/Phytane Legend

< 1.5 Anoxic - Subaqueous (lacustrine or marine)
1.5 - 3.0 Trans - Transitional environment
> 3.0 Oxic - Subaerial environment

Palynological scheme legend

SPORE-POLLEN:

T. be	= T. bellus
P. tu	= P. tuberculatus
N. as	= N. asperus
P. as	= P. asperopolus
M. di	= M. diversus
L. ba	= L. balmei
F. lo	= F. longus
T. li	= T. lilliei
N. se	= N. senectus
T. ap	= T. apoxyexinus
P. ma	= P. mawsonii
H. un	= H. uniforma (A. di = A. distocarinatus)
P. pa	= P. pannosus
C. pa	= C. paradoxa
C. st	= C. striatus
C. hu	= C. hughesii
P. no	= P. notensis
F. wo	= F. wonthaggiensis
C. au	= C. australiensis
R. wa	= R. watheroensis

DINOFLAGELLATES:

C. in	= C. incompositum
D. he	= D. heterophylcta
A. hy	= A. hyperacantha
A. ho	= A. homomorphom
E. cr	= E. crassitabulata
T. ev	= T. evittii
M. dr	= M. druggii
I. ko	= I. korojenense
X. au	= X. australis
N. ac	= N. aceras
I. ro	= I. rotundatum
I. cr	= I. cretaceum
O. po	= O. porifera
C. st	= C. striatoconus
P. in	= P. infusorioides

N.B. Not all palynological zones in the legend have been used in this wellsheet.

Palynologists' environments legend

nm - non marine
lac - lacustrine
est - estuarine
mm - marginal marine
ns - nearshore marine
om - offshore marine

N.B. Environments are based on spore-pollen/dino ratios.

Hydrocarbon shows/tests legend

- Gas show (weak)
- Gas show (strong)
- Gas zone
- Oil show (weak)
- Oil show (strong)
- Oil zone
- Oil/gas show (weak)
- Oil/gas show (strong)
- Oil fluorescence
- CO_2 zone
- RFT test

N.B. Not all hydrocarbon symbols in the legend have been used in this wellsheet.

Depth(kb) | Casing | CALI 3–23 IN | SP -20–150 MV | GR 0–200 GAPI | Lithologies | Sidewall | Core | Accessory minerals C P G M | LLS 0.2–2000 OHMM | LLD 0.2–2000 OHMM | DRHO -0.4–0.1 G/CC | RHOB 1.95–2.95 G/CC | NPHI 0.45–-0.15 V/V | Sonic Log 140–40 US/F | TWT (ms) datum (msl) | Lithostratigraphy | Palynologists' palaeoenvirons nm lac est mm ns om | Spore/pollen zones | Dino zones | Hydrocarbon shows/tests: Show | Tests | Description | Pristane/Phytane: Ratio | Environ | Palaeoenvironment from integrated analysis | Sequence stratigraphic scheme | Depth(kb)

TWT (ms) datum (msl)	Lithostratigraphy
0	Post Eumeralla
400	Eumeralla Fmn.
700	Heathfield Sstone.
800	Eumeralla Fmn.
900	Windermere Sstone.
1000	Crayfish Group
1200	

Spore/pollen zones: C. pa; C. st; C. hu; F. wo

Depth(kb)	Hydrocarbon shows/tests: Description
700	gas cut salt water on DST (C1)
900	very gassy water which flared (dom C1)
1500	muddy gassy salt water (dom C1)
1500	muddy gassy salt water (C1 & C2)